

TRADE NAME RME, Model VHF-152A MANUFACTURER Radio Mfg. Engineers, Inc., 300-306 1st Ave., Peoria, Illinois TYPE SET AC Operated Frequency Converter with Output Frequency of 7MC (Nominal) TUBES (FOUR) Types 6AK5 RF Amp., 6J6 Converter, VR150 Voltage Regulator, 5Y3GT Rectifier							
POWER SUPPLY 110-120 Volts AC TUNING RANGE—SHORT WAVE 27.0-29.8MC. 49.5-54.2MC. 143.8-148.2MC RATING .38 Amp. @ 117 Volts AC							
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
To set pointer turn tuning cap. fully closed and set pointer to last reference mark at low freq. end of dial.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1 .01MFD	High side to Pin 5 (grid) of 6J6. Low side to chassis.	6.95MC	27.0-29.8MC	Tuning cap. fully open.	Across voice coil of associated rec.	A1	Adjust for maximum output
2 300Ω carbon resistor	High side to either 2 meter ant. terminal. Low side to other terminal.	148MC	144-148	148MC	Across voice coil of associated rec.	A2	Adjust for maximum output. Tune signal gen. to 161.9MC. If signal is not heard retune signal gen. to 148MC and open A2 to next peak. Adjust for maximum output and re-check for image.
3 300Ω carbon resistor	High side to either 2 meter ant. terminal. Low side to other terminal.	144MC	144-148	144MC	Across voice coil of associated rec.	A3	Adjust for maximum output. Repeat steps 2&3 until no further improvement can be made.
4 300Ω carbon resistor	High side to either 2 meter ant. terminal. Low side to other terminal.	148MC	144-148	Tune for maximum output.	Across voice coil of associated rec.	A4, A5	Rock tuning cap. and adjust A4&A5 for maximum output.
5 300Ω carbon resistor	High side to either 6 meter ant. terminal. Low side to other terminal.	54MC	50-54MC	54MC	Across voice coil of associated rec.	A6	Adjust for maximum output. Tune signal gen. to 67.9MC. If signal is not heard, returned signal gen. to 54MC and open A6 to next peak. Adjust for maximum output and re-check for image.
6 300Ω carbon resistor	High side to either 6 meter ant. terminal. Low side to other terminal.	50MC	50-54MC	50MC	Across voice coil of associated rec.	A7	Adjust for maximum output. Repeat steps 5 & 6 until no further improvement can be made.
7 300Ω carbon resistor	High side to either 6 meter ant. terminal. Low side to other terminal.	54MC	50-54MC	Tune for maximum output.	Across voice coil of associated rec.	A8, A9	Rock tuning cap. and adjust A8 & A9 for maximum output.
8 300Ω carbon resistor	High side to either 10 meter ant. terminal. Low side to other terminal.	29.7MC	27-29.7MC	29.7MC	Across voice coil of associated rec.	A10	Adjust for maximum output. Tune signal gen. to 43.6MC. If signal is not heard, retune signal gen. to 29.7MC and open A10 to next peak. Adjust for maximum output and re-check for image.
9 300Ω carbon resistor	High side to either 10 meter ant. terminal. Low side to other terminal.	27MC	27-29.7MC	27MC	Across voice coil of associated rec.	A11	Adjust for maximum output. Repeat steps 8 & 9 until no further improvement can be made.
10 300Ω carbon resistor	High side to either 10 meter ant. terminal. Low side to other terminal.	29.7MC	27-29.7MC	Tune for maximum output.	Across voice coil of associated rec.	A12, A13	Rock tuning cap. and adjust A12 & A13 for maximum output.

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DATE 12/48-#4821-18 SET #51-FOLDER #18

PARTS LIST AND DESCRIPTIONS

RME MODEL
VHF-152A

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		BAA BASE TYPE	INSTALLATION NOTES
		RME PART No.	STANDARD REPLACEMENT		
1	RF Amp.	6AX5	6AX5	7BP	
2	Converter	6V6	6V6	7BF	
3	Voltage Reg.	VR150	VR150	44J	
4	Rectifier	5Y3GT	5Y3GT	5T	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES
		RME PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SOLAR PART No.	
5A	10 CAP.	AF22J		UF1145	DY-2X10-450	EL-210
B	10 450					
6	10 600					
7	10 300	684-01		D7681	ST-6-01	TC-11
8	1 5 300					
9	25 300					
10	25 300					
11	1000 300					
12	25 300	1467-001		1WSD1	MW.5-21	1FM-21
13	25 300	1469-000025		SRSQ25	MOS.5-425	MS-425
14	25 300	1469-0001		SRS71	MOS.5-31	MS-31
15	15 300					
16	1000 500	1467-001		1WSD1	MW.5-21	MS-415
17	1000 500	1467-001		1WSD1	MW.5-21	1FM-21
18	1000 500	1467-001		1WSD1	MW.5-21	1FM-21
19	1000 500	1467-001		1WSD1	MW.5-21	1FM-21
20	15 300					
21	5 300	1469-000005		SRSV5	MOS.5-55	MS-55
22	1000 500	1467-001		1DSD1	MW.5-21	1FM-21

Note 1. Negative temperature coefficient.

Note 2. Some models use only a single 1000 MTFD Cap. as RF Conv. Bypass.

RESISTORS

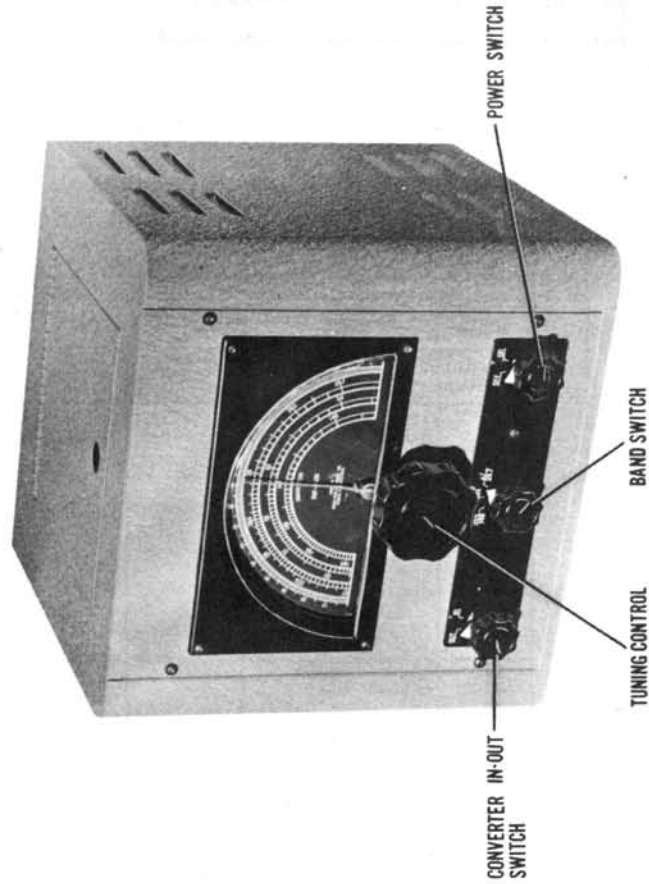
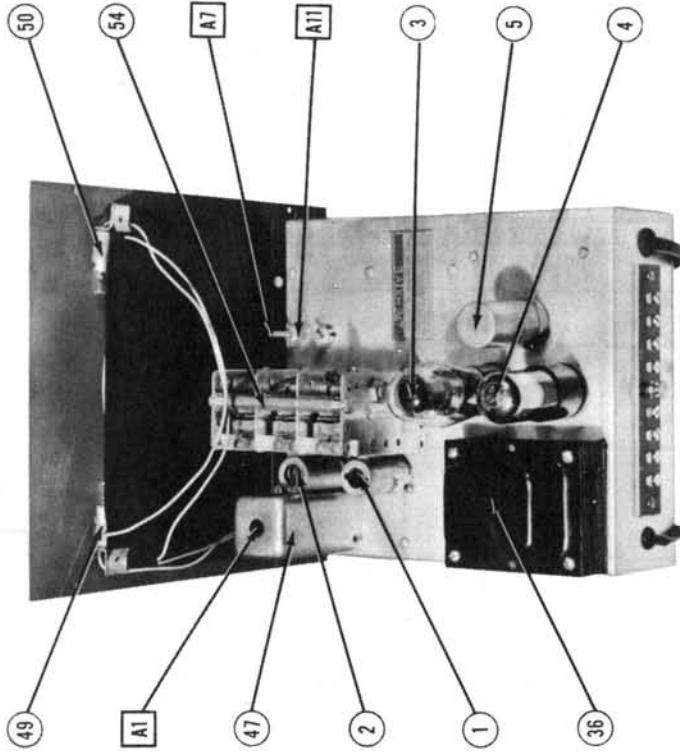
ITEM No.	RATING	REPLACEMENT DATA		IDENTIFICATION CODES
		RME PART No.	IRC PART No.	
24	180			Br.-Gray-Blk. Parasitic Suppressor
25	110K		BTS-100K	Br.-Br.-Yl. RF Grid
26	220K			Red-Red-Br. RF Cathode
27	15K		BTS-15K	Br.-Orn.-Or. RF Screen
28	18K		BT-2-18K	Br.-Gray-Or. RF Plate Load
29	100K		BTS-100K	Br.-Blk.-Yl. Converter Grid
30	500		BTS-1000	Grn.-Blue-Blk. Converter Cathode
31	1000K			Br.-Blk.-Red. Converter Cathode
32	4700K		BTS-4700	Br.-Gray-Br. Parasitic Suppressor
33	18K		BT-2-18K	Yl.-Vl.-Red. Oscillator Grid
34	3500K			Br.-Gray-Or. Oscillator Plate
35			AB-3500	Voltage Dropping

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA		
	PRI.	SEC. 1	SEC. 2	RME PART No.	STANCOR PART No.	THORDARSON PART No.
36	117VAC @ .38A	620VCT @ .38A	5.2VAC @ 2.0A @ 1.0A		P-947 #	T22R04

Add series resistor to reduce plate voltage.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	TOTAL DIRECT CURRENT	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
		D. C. RESISTANCE	INDUCTANCE (10 ³ CURRENT 1000 ³)	RVE PART NO.	STANCOR PART NO.	THORDARSON PART NO.	
37	.05A	565Ω	20 Henries		C-1003	T20053	C-2987

R F COILS

ITEM No.	USE	REPLACEMENT DATA		
		DC RES.		MEISSNER PART No.
		PRI.	SEC.	
38	Ant. Coils			
39	10 Meter	0Ω	0Ω	
40	6 Meter	0Ω	0Ω	
41	2 Meter	0Ω	0Ω	
42	RF Coils			
43	10 Meter	0Ω	0Ω	
44	6 Meter	0Ω	0Ω	
45	2 Meter	0Ω	0Ω	
46	Osc. Coils			
47	10 Meter	0Ω	0Ω	
48	6 Meter	0Ω	0Ω	
49	2 Meter	0Ω	0Ω	
50	IF Coil	0Ω	0Ω	
51	Osc. Plate	0Ω	0Ω	
52	Choke	0Ω	0Ω	

DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		INSTALLATION NOTES
				BEAD COLOR	RVE PART No.	
49	Bayonet	6-8V	0.15A	Brown		Type #47
50	Bayonet	6-8V	0.15A	Brown		Type #47

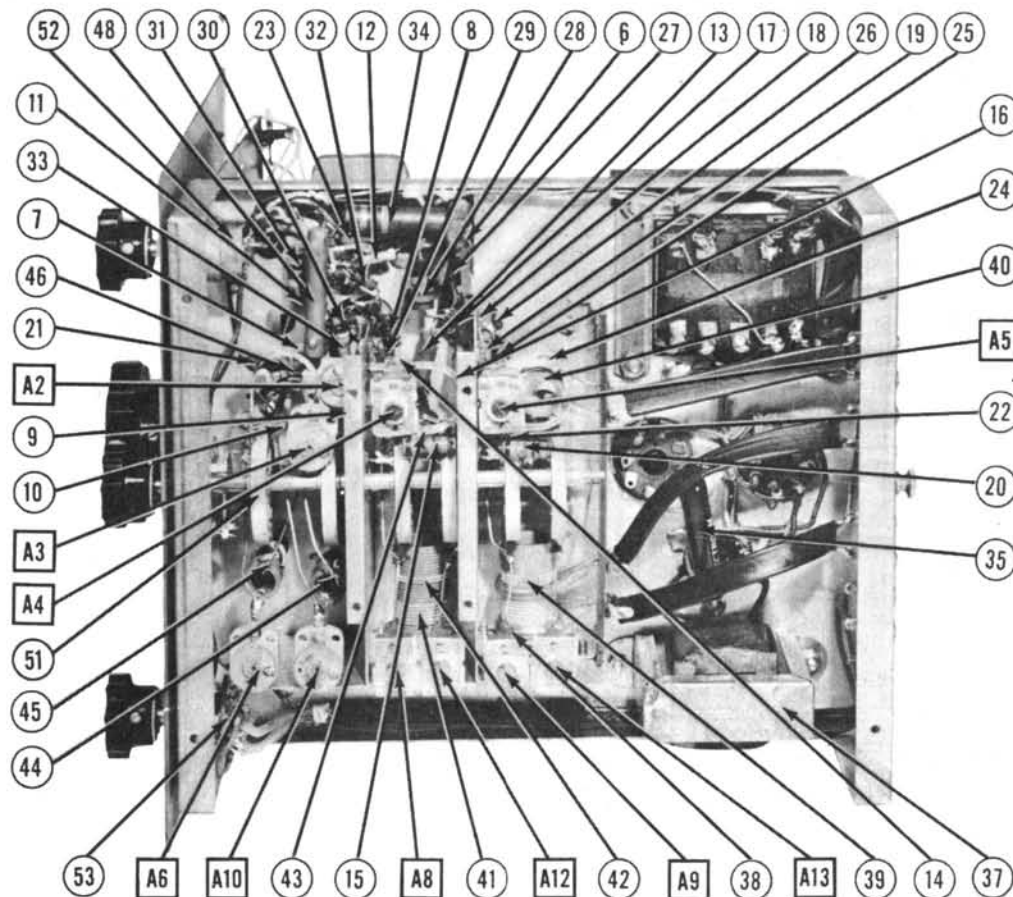
MISCELLANEOUS

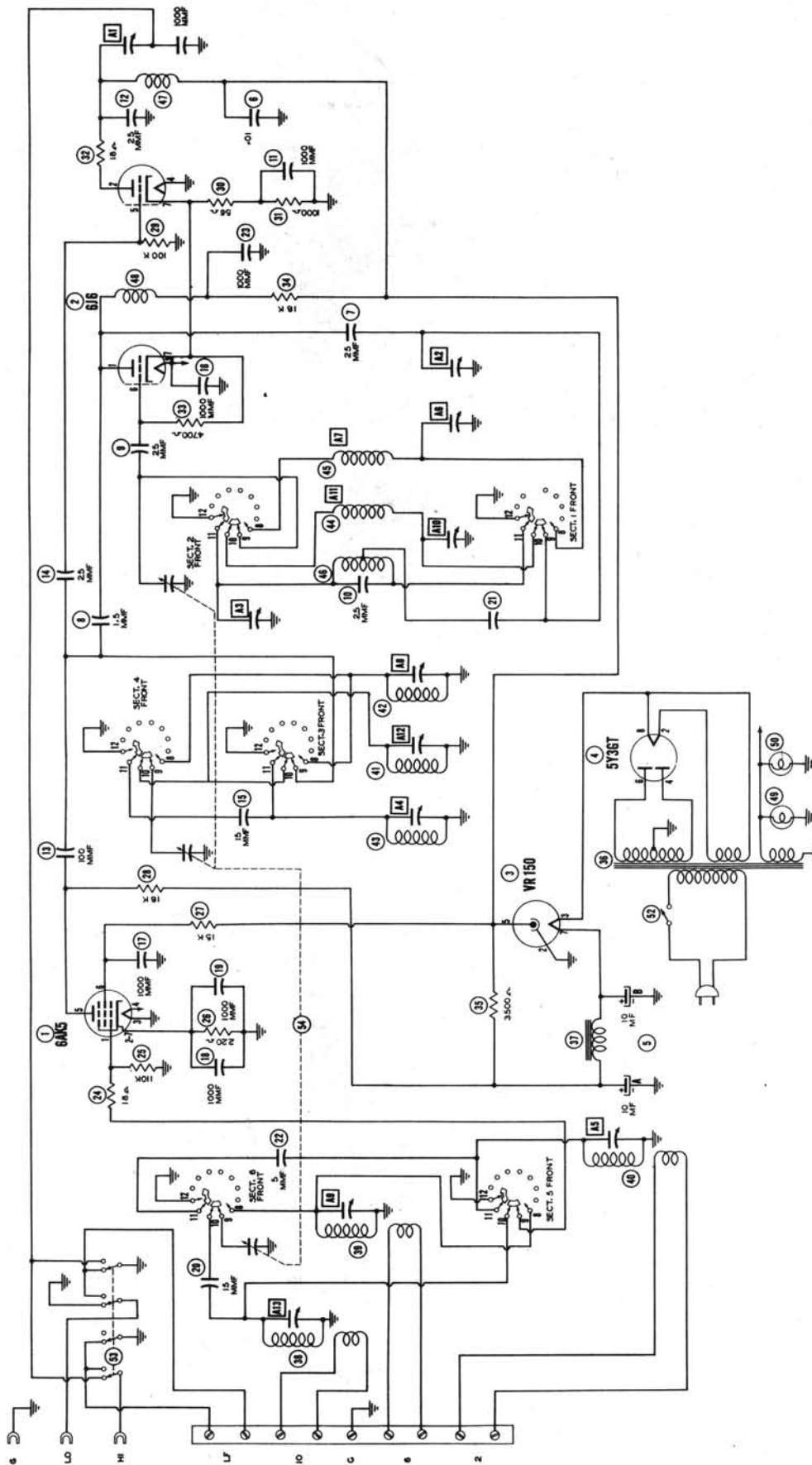
ITEM No.	PART NAME	RVE PART No.	NOTES
51	Switch		Band
52	Switch		AC on-off
53	Switch		Antenna Change-over
54	3 Gang Var.Cap.		

EXTERNAL CONNECTIONS

The output cable should be connected to the antenna terminal of the receiver. The cable has two shielded leads and a ground lead each ending in a terminal lug. On receivers which have provision for doublet operation, such as the RME-45 and the RME-84, the blue coded lead must be connected to the antenna terminal farthest from the ground terminal. This is the hot side of the converter output. The red lead, or low side, must be connected to the antenna terminal nearest to the ground terminal. The ground braid should be connected to the receiver ground. On receivers not equipped for doublet operation, the blue lead should be connected to the antenna terminal and the red and ground (shield) leads should be connected to the receiver ground. This lead is coded white. Unless the above instructions are followed, the changeover switch will not operate properly.

CHASSIS—BOTTOM VIEW





VOLTAGE AND RESISTANCE READINGS TAKEN WITH BANDSWITCH ON 10 METER BAND.

Run	Table	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6AK5	OV.	2V10C	OV.	6.8VAC	146VDC	1.16VDC	2V10C	-
2	6A10	6S10C	150VDC	6.8VAC	OV.	OV.	-8.4VDC	6.6VDC	-
3	VR-150	OV.	3S5VDC	OV.	3S5VDC	1.10VDC	OV.	3S5VDC	OV.
4	8V90T	OV.	3S5VDC	OV.	3.10VAC	OV.	3.10VAC	OV.	3S5VDC

Year	Feb 1	Feb 2	Feb 3	Feb 4	Feb 5	Feb 6	Feb 7	Feb 8
1	6A05	2252	02	- 112	4250X	4250X	2252	-
2	616	4252X	410X	02	100X3	5.76X	1.282	-
3	17-150	119	02	4252X	119	4252X	400X2	119
4	57677	119	400X0	709	2120	1155	709	470X2

RESISTANCE READINGS IN THE 8+ CIRCUITS MAY VARY WIDELY ACCORDING TO THE CONDITION OF THE FILTER CAPACITORS. THE COOPERATION OF THE MANUFACTURER OF THIS EQUIPMENT MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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